

June 17, 2004

Ms. Jessica Nichols Meridian Architects & Engineers 26412 Broadkill Road Milton, DE 19968

RE: PLUS review – PLUS #2004-05-02 – Double Eagle Farms

Dear Ms. Nichols:

Thank you for meeting with State agency planners on May 27, 2004 to discuss the proposed plans for the Double Eagle Farms project to be located on Townsend Road in Sussex County.

According to the information received, you are seeking a site plan approval to build 70 single family homes on 65.13 acres.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

This office has received the following comments from State agencies:

## Office of State Planning Coordination – Contact: Ann Marie Townshend 739-3090

The Office of State Planning Coordination notes that this project is in a "rural" area according to the 1999 Strategies for State Policies and Spending. The current draft of the 2004 Strategies for State Policies and Spending indicates that this designation will continue. This project is also located within the low density area defined in the Sussex County Comprehensive Plan. For these reasons, the Office of State Planning Coordination cannot support this development project.

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We also share the concerns raised by other agencies regarding the lot lines containing forested areas and potential wetlands. If the developer continues to move forward with this project, we encourage you to redesign the layout to incorporate the comments listed below by State agencies, particularly those related to preserving the forested and wetland areas on the site.

# State Historic Preservation Office (SHPO) – Contact: Anne McCleave 739-5685

This development is located in a rural area and immediately west of a potential historic property that could be historically significant because of the rural context. There is also a high probability for prehistoric and historic archaeological sites within the area. Therefore, SHPO does not support this development.

If this development takes place, it is strongly recommended that the development stay out of the forested areas and that landscaping be provided on the eastern edge to lessen any visual and contextual effects to the potential historic property.

## **Department of Transportation – Contact: Bill Brockenbrough 760-2109**

Because the development is proposed for a Rural Area, it is inconsistent with the Strategies for State Policies and Spending. Therefore DelDOT will not participate in the cost of any road improvements needed to support this development.

In accordance with Section 2 of DelDOT's <u>Rules and Regulations for Subdivision Streets</u>, DelDOT will require a right-of-way dedication of 30 feet from the centerline on Townsend Road.

As part of the entrance improvements, DelDOT anticipates requiring the applicant to improve Townsend Road to more nearly meet DelDOT local road standards (11-foot travel lanes and 5-foot shoulders) from Harmony Cemetery Road to Avalon Road.

DelDOT will require a sight distance analysis at the proposed entrance location.

Because the development is proposed for a Rural Area, our preference is that the adjacent parcels not be developed. However, because the potential for their development exists, stub streets should be provided from the north section to the adjoining parcel on the east, and from the south section to the adjoining parcels on the east, west and south.

The applicant's engineer should contact the DelDOT Subdivision Manager for Sussex County, Mr. John Fiori, regarding the above comments and more generally about our requirements with regard to the design of the site entrance. Mr. Fiori may be reached at (302) 760-2260.

# <u>The Department of Natural Resources and Environmental Control – Contact:</u> Kevin Coyle 739-3091

#### Soils

According to the soil survey update, the following soils were found in the immediate vicinity of the proposed construction and grouped on the basis of drainage class:

Excessively well drained – Evesboro & Fort-Mott Henlopen complex Well Drained – Downer

Somewhat well drained – Rosedale & Ingleside

Very poorly drained (**hydric**) – Longmarsh-Indiantown complex

Evesboro and Fort Mott Henlopen complex are excessively well-drained soils that have moderate limitations on account of rapid permeability. Downer is a well-drained upland soil that has few limitations for development. Rosedale and Ingleside are somewhat well-drained upland soils that, generally, have few limitations for development. Longmarsh-Indiantown complex is a poorly-drained wetland associated (hydric) soil that has severe limitations for development.

Although most of the soils on subject parcel are fairly well drained, they have limitations associated with rapidly permeable sandy surface and subsurface horizons. Such soils are conducive to nutrient leaching via groundwater or surface runoff into the surrounding watershed. In soils containing shallow water tables or found in close proximity to waterbodies, these impacts are greatly intensified.

#### Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of portions of a 5 acre area of palustrine forested wetland. Site plans indicate that impacts to wetlands are likely, particularly because lot lines contain wetlands.

Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

Because there is strong evidence that federally regulated wetlands exist on site, a wetland delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified by the Corps of Engineers through the Jurisdictional Determination process.

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Impacts to wetlands should be avoided. Wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers, preferably of at least 100 feet, should be employed from the edge of the wetland complex; these buffers should also be excluded from lots. Lots should be removed in their entirety from wetlands and their forested buffers. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners. It is further recommended that all wetlands and buffer zones set aside on site be protected through permanent conservation easement or other binding mechanism.

#### **TMDLs**

With the adoption of Total Maximum Daily Loads (TMDLs) as a "nutrient-runoff-mitigation strategy" for reducing nutrients in the Inland Bays Watershed, reduction of nitrogen and phosphorus loading will be mandatory. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are authorized under federal code, states are charged with developing and implementing standards to support those desired use goals. The Jurisdictional authority for attaining these use goals will fall under the auspices of Section 11.5 of the State of Delaware's Surface Water Quality Standards (as amended August 11, 1999), and will be achieved via nutrient reductions referred to as "pollution control strategies."

Nutrient reductions prescribed under TMDLs are assigned on basis of water quality concerns – that is, the those regions deemed to be of greatest environmental concern will require correspondingly higher levels of nutrient reduction than those regions deemed less environmentally sensitive. In this watershed, these regions are demarcated as high and low reduction zones. The high reduction zone corresponds to the western portion of the watershed, and requires a reduction of nitrogen and phosphorus by 85 and 65 percent, respectively. The low reduction zone corresponds to the eastern portion of the watershed, and requires a reduction of nitrogen and phosphorus by 40 percent. **This project is proposed within the low nutrient reduction zone.** 

In order for the applicant to verify compliance with the TMDL mandate, a full nutrient accounting process known as nutrient budget should be prepared. The developer/consultant should contact Lyle Jones in the Department's Watershed Assessment Section for further information regarding the acceptable protocol for calculating a nutrient budget. He can be reached as 739-4590.

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## **ERES Waters**

This project is located adjacent to receiving waters of Inland Bays designated as waters having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in Section 11.5 of Delaware's "Surface Water Quality Standards" (as amended August 11, 1999), specify that all designated ERES waters and receiving tributaries develop a "pollution control strategy" to reduce non-point sources of nutrient runoff through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 11.5(e) of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree practicable, or where attainable, a standard requiring no discharge of pollutants.

# **Habitat and Open Space**

This parcel borders Phillips Branch, a tributary of the Inland Bays which leads to Hopkins Prong and Herring Creek. The forests and wetlands associated with Phillips Branch provide important habitat for resident and migratory wildlife populations, help maintain and improve water quality in the Inland Bays and provide air quality benefits.

Site plans show that all the wetland and forested areas on site will be contained within lot lines. DNREC strongly recommends that lot lines be relocated to exclude these areas and that these areas be dedicated as community open space and placed into a permanent conservation easement. The forested area will be significantly comprised by construction and homeowner activities if lots are allowed to contain them and will not provide adequate buffering capacity to Phillips Branch and the wetland areas. A forested buffer of 100' or more should be employed; where a buffer does not currently exist, the developer should strongly consider revegetating the area with native trees and shrubs.

#### Recreation

It is recommended that sidewalks be built fronting every residence. A complete system of sidewalks will: 1) fulfill the recreation need for walking and biking facilities 2) provide opportunities for neighbors to interact in the community and 3) facilitate safe, convenient off-road access to neighboring communities, public mass transit stops, schools, stores, work etc.

If a trail system is planned, we recommend that a series of stacking trail loops be designed with access points in each subdivision "pod" and connections to adjacent communities. Community trail systems with long continuous trails, perimeter-only trails, and systems with few access points, often go unused and neglected. For trail design/construction specifications, contact Susan Moerschel at (302) 739-5285.

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The Division of Parks and Recreation conducted a telephone survey of Delaware residents to gather information on outdoor recreation patterns and preferences as well as other information on their landscape perception. These findings are the foundation of the 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) providing guidance for investments in needed outdoor recreation facilities. The high and moderate facility needs in Eastern Sussex County are listed below. Consideration should be given to incorporate some of these recreation opportunities into the project.

High priorities include walking and jogging paths, bike paths, and fishing areas.

Moderate priorities include picnic areas, skate facilities, canoe/kayak access, hiking trails, swimming pools, playgrounds, soccer fields, tennis courts, power boat access, and baseball/softball fields.

## **Underground Storage Tanks**

There are no LUST sites located near the proposed project. However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would be need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel in the contaminated areas.

# **State Fire Marshal's Office – Contact: Kevin McSweeney 739-3696**

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

# a. Fire Protection Water Requirements:

➤ Since the dwellings of the subdivision are proposed to be served by individual on-site wells (No Central Water System), set back and separation requirements will apply.

## b. Accessibility:

All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Townsend Road (303) must be constructed so fire department apparatus may negotiate it.

- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turnaround or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- ➤ If the use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

# c. Gas Piping and System Information:

> Provide type of fuel proposed, and show locations of bulk containers on plan.

# d. Required Notes:

- ➤ Provide a note on the final plans submitted for review to read "All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
- Proposed Use
- ➤ National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- ➤ Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: <a href="www.delawarestatefiremarshal.com">www.delawarestatefiremarshal.com</a>, technical services link, plan review, applications or brochures.

### Department of Agriculture - Contact: Mark Davis 739-4811

A forested buffer is required between the proposed subdivision and all adjacent properties in active agricultural use. In addition, a forest buffer should be maintained for those pre-existing residential properties and along all streams, wetlands, and river that border the proposed subdivision.

The developer should consider a diverse landscape plan that uses Delaware native tree and shrub species and encourages the "Right Tree for the Right Place" concept.

## Public Service Commission - Contact: David Bonar 739-4247

There is no existing certificate of public convenience and necessity (CPCN) for this area; therefore, a CPCN must be obtained by the intended water provider.

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Any natural or propane gas distribution system must meet with pipeline safety requirements.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the preapplication process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. We again note that the State cannot support a development project in this location. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP

Director

CC: Double Eagle Farms, LLC

Sussex County